REMARKS

Claims 1-17 are pending in this application, of which claims 1-12 have been amended and claims 13-17 are newly-added.

The Examiner has indicated that Fig. 2 should be labeled as "Prior Art". Such a corrected print is attached hereto.

The title has been corrected to read:

AN APPARATUS AND PROCESS FOR PRODUCING METAL FOIL

Claims 1-12 stand rejected under 35 USC §112, second paragraph, as indefinite.

Accordingly, claims 1-12 have been amended to correct the noted instances of indefiniteness.

In particular, the terminology "the pulse current density of the auxiliary anode is greater than that of the anode", recited in claims 1 and 13 is based on the description of Example 1, which is cited by Example 6 corresponding to the amended claims in terms of passing pulse current, (page 12, lines 1-20, that is, "passing current between the cathode 1 and the anode 2 at a current density of 120 A//dm^2 and passing current through the auxiliary anode 7 at 200 A/dm^2").

Thus, the 35 USC §112, second paragraph, rejection should be withdrawn.

Claims 1-12 stand rejected under 35 USC §103(a) as unpatentable over U.S. Patent 6,663,758 to Motohashi et al. (hereinafter "**Motohashi et al.**") in view of JP08-109490 (hereinafter "**JP '490**").

Applicants respectfully traverse this rejection.

A feature of the process for producing metal foil according to the present invention is to pass pulse current from the auxiliary anode to the cathode to adust the pulse current density when electrodeposition is started.

Generally, in pulse electrolysis, the electrodeposition is conducted on the cathode and oxygen evolution reaction (i.e., oxidation reaction) occurs on the anode during passing current. During non-passing current, the electrode call "the anode" serves as a cathode. In the anode, so-called electrochemical cell reaction occurs and continues until the oxygen adsorbed on the surface of the anode is consumed through the reduction reaction.

Accordingly, the auxiliary anode is exposed to both oxidation and reduction, that is, the auxiliary anode is used under very severe conditions.

The present inventors have conducted extensive research in an attempt to overcome this problem and have found an electrode which is exceedingly superior in function and durability even under such severe conditions, and have accomplished the present invention.

That is, using the auxiliary anode defined in the present invention, durability of the auxiliary anode is exceedingly improved even in the pulse electrolysis. The advantageous effects of the present invention are apparent from Table 2 showing the comparison between the result of Example 6 and that of Comparative Example 2.

Incidently, the feature of the pulse electrolysis is that it can produce many crystalline nuclei under high current density, and then the nuclei grow and the electrodeposition state of

metal foil is made uniform.

Neither **Motohashi et al.** nor **JP '490** teaches, mentions or suggests that the pulse current is passed from the auxiliary anode to the cathode to adjust the pulse current density so that the pulse current density of the auxiliary anode is greater than that of the anode when electrodeposition is started, as recited in independent claim 1, as amended, and in newly-added claim 13. Thus, the 35 USC §103(a) rejection should be withdrawn.

Claims 1-11 stand rejected under 35 USC §103(a) as unpatentable over U.S. Patent 5,215,646 to Wolski et al. (hereinafter "**Wolski et al.**") in view of **JP '490**.

Applicants respectfully traverse this rejection.

Wolski et al., like the other cited references, fails to teach, mention or suggest the limitations in clam 1, as amended, or the limitations in newly-added claims 13-17, and the 35 USC §103(a) rejection should be withdrawn.

In view of the aforementioned amendments and accompanying remarks, claims 1-17, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures: Replacement Sheets of Drawing (Figs. 1-2)
Substitute Abstract of the Disclosure
Petition for Extension of Time

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IN THE DRAWINGS:

The attached sheet of drawings includes changes to Fig. 2. This sheet, which includes Figs. 1 and 2, replaces the original sheet including Figs. 1 and 2. Fig. 2 has been labeled as "Prior Art".